

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Bjornard, et al.
Title : ANTIREFLECTION COATING FOR A TEMPERATURE
SENSITIVE SUBSTRATE

Application for Reissue of U.S. Patent No. 5,579,162
Issued : November 26, 1996

Asst. Commissioner of Patents and Trademarks
Washington, DC 20231

ASSENT BY ASSIGNEE

Under 37 CFR §3.73(b), Viratec Thin Films, Inc., a corporation of Minnesota, certifies that it is the assignee of the entire right, title and interest in the patent identified above by virtue of an assignment from the inventors. The assignment was recorded in the Patent and Trademark Office at Reel 7385, Frame 0230 on March 13, 1995.

The undersigned has reviewed all the documents in the chain of title of the patent, and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned, whose title is supplied below, is empowered to act on behalf of the assignee.

The undersigned, acting on behalf of the assignee, hereby offers to surrender the above-identified Letters Patent, and assents to the accompanying reissue application.

"EXPRESS MAIL" Mailing Label Number EM3677620330US
Date of Deposit 8/19/97
I hereby certify under 37 CFR 1.10 that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office To Addressee" with sufficient postage on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.


Christopher A. Hamre
Christopher A. Hamre

00914868-081997

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Date: _____

8/11/97



Erik J. Bjornard
Vice President and General Manager
Viratec Thin Films, Inc.

31129

2025 OCT 20 16:57

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Bjornard, et al.
Title : ANTIREFLECTION COATING FOR A TEMPERATURE
SENSITIVE SUBSTRATE

Application for Reissue of U.S. Patent No. 5,579,162
Issued : November 26, 1996

Commissioner of Patents and Trademarks
Washington, DC 20231

Declaration and Petition of Erik J. Bjornard, Jr.,
and William A. Meredith, Jr. Pursuant to
35 U.S.C. §251 and
37 C.F.R. §1.171 et seq.

Sir:

As joint inventors for the above-captioned U.S. Letters Patent, we, Erik J. Bjornard, ~~my~~, and William A. Meredith, Jr., declare that we verily believe that each of us is an original, first and joint inventor of the subject matter which is described and claimed in the aforesaid patent for which we solicit a reissue patent; that we have reviewed and understand the contents of the above-identified reissue application, including its specification and claims; that we acknowledge the duty to disclose all information of which we are aware which is material to the examination of this reissue application in accordance with Title 37, Code of Federal Regulation (C.F.R.), §1.56(a); that the aforesaid patent is partly inoperative by reason of claiming less than we had a right to claim in the patent; and that said partial

why?

"EXPRESS MAIL" Mailing Label Number EM3677620330S
Date of Deposit 8/19/97
I hereby certify under 37 CFR 1.10 that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office To Addressee" with sufficient postage on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Christopher A. Hamre
Christopher A. Hamre

0891468-081997

Not
True
impossible

inoperativeness is a result of error which arose without any deceptive intention.

A reissue application is attached hereto, with additions to be made by reissue underlined and deletions in square brackets. The temporary drawing consists of a copy of the printed drawings of the patent.

As required by 37 C.F.R. §1.171, an order for a title report is enclosed. Also enclosed is an offer to surrender the original patent pursuant to 37 C.F.R. §1.178, and an assent to this reissue application by the assignee, Viratec Thin Films, Inc., pursuant to 37 C.F.R. §1.172.

The reasons which form the basis for this reissue application, and the resulting partial inoperativeness of the patent, can be summarized as follows:

In the coatings of the present invention, the preferred deposition technique described in the specification is DC reactive sputtering. Issued independent claim 1 (and dependent claims 2-7) recite a coated article comprising at least one layer of "a DC reactively sputtered material..." Independent claim 8 recites a process comprising a step "of DC reactively sputtering a material..." Independent claims 9 and 10 recite a coating comprising two layers "substantially composed of DC reactively sputtered tin oxide..." (As to the coating claims 9 and 10, applicants believe the specified coatings to have been novel and nonobvious without reference to the DC reactively sputtering limitation, which accords with the Examiner's statement of reasons for indication of allowable subject matter in paper 8. As to claim 1, applicants maintain, as argued in the response filed November 8, 1995, that "one aspect of the invention by Applicant is not simply the use of certain materials in an anti-reflective coating, but the determination that certain materials are suitable for sputtering deposition on temperature sensitive substrates". Although DC reactive sputtering was the preferred

08914868-081997

No

form of sputtering, the potential for other sputtering or other reactive sputtering gives rise to the reason for reissue of the patent.

Thus, the amended claims in reissue, which in the case of dependent claims are treated as including the limitations of base and intervening claims, correspond to issued claims as follows:

Reissue claims 1-8 delete the term "DC reactively" which modifies the sputtered material in issued claims 1-8, respectively. Reissue claims 9 and 10 delete the term "DC reactively sputtered" modifying the term tin oxide in issued claims 9 and 10. Reissue claims 11-18 are, respectively, identical to issued claims 1-8. Reissue claims 19 and 21 correspond to issued claims 9 and 10 without the term "DC" modifying "reactively sputtered". Reissue claims 20 and 22 are identical to issued claims 9 and 10. Reissue claims 23-30 correspond to issued claims 1-8 without the limitation of "DC reactively" modifying "sputtered material".

Reissue claims 31 and 32 are issued claims 9 and 10 without the limitation of "DC reactively" modifying "sputtered".

The error was discovered by applicants upon our review of the issued patent after issue. At the time the application was filed, DC reactive sputtering was the common and preferred method of sputtering materials such as those used in the present invention. Subsequent developments, especially in the increased availability of AC power supplies of suitable size, have correspondingly increased the commercial practicability of the use of AC sputtering techniques. In view of the foregoing, when the issued patent was reviewed it became apparent to applicants that a failure to include the use of AC sputtering techniques within the scope of processes and products which would literally infringe the claims was an error suitable for correction by the present reissue application. Subsequent review of the patent by

applicants and our attorneys prior to the filing of this reissue application, it was determined that including the sputtering limitations in claims 9 and 10 was also an error to be addressed in reissue.

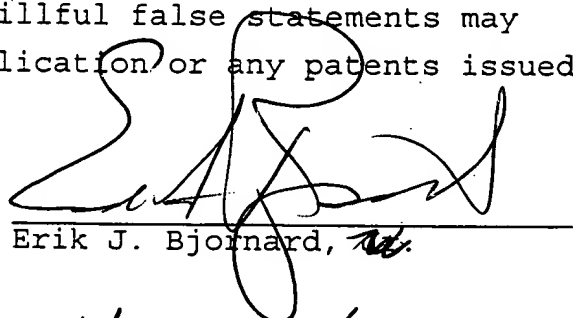
We hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: William J. Egan, III (Reg. No. 28,411), John W. Freeman (Reg. No. 29,066), David J. Goren (Reg. No. 34,609), Scott C. Harris (Reg. No. 32,030), John Land (Reg. No. 29,554), Hans R. Troesch (Reg. No. 36,950), John R. Wetherell, Jr., (Reg. No. 31,678), William B. Slate (Reg. No. 37,238).

Please address all telephone calls to William J. Egan at telephone number 415/322-5070.

Please address all correspondence to William J. Egan, Fish & Richardson P.C., 2200 Sand Hill Road, Suite 100, Menlo Park, CA, 94025.

We hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Date: 8/11/97


Erik J. Bjornard, *att.*

Date: 8/11/97


William A. Meredith, Jr.

31129

*PATENT

ATTORNEY DOCKET NO. 07041/082001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Bjornard, et al.
Title : ANTIREFLECTION COATING FOR A TEMPERATURE
SENSITIVE SUBSTRATE

Application for Reissue of U.S. Patent No. 5,579,162
Issued : November 26, 1996

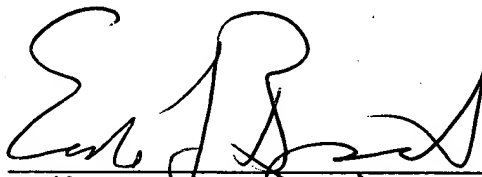
Commissioner of Patents and Trademarks
Washington, DC 20231

OFFER TO SURRENDER

We, Erik J. Bjornard, Jr., and William A. Meredith,
Jr., joint inventors for the above-captioned U.S. Letters Patent,
which is the subject of the accompanying application for the
reissue, hereby offer to surrender the above-captioned U.S.
Letters Patent.

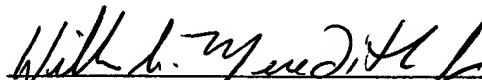
Date:

8/11/97


Erik J. Bjornard, Jr.

Date:

8/5/97


William A. Meredith, Jr.

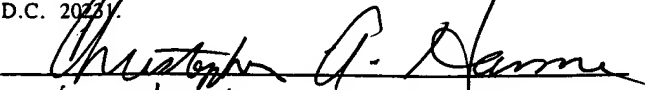
31129

Express mail No: EM367762033US

Date of Deposit

8/19/97

I hereby certify under 37 CFR 1.10 that this correspondence is
being deposited with the United States Postal Service as Express
mail with sufficient postage on the date indicated above and is
addressed to the Assistant Commissioner for Patents, Washington,
D.C. 20231.


Christopher A. Hamre

08914868-081997